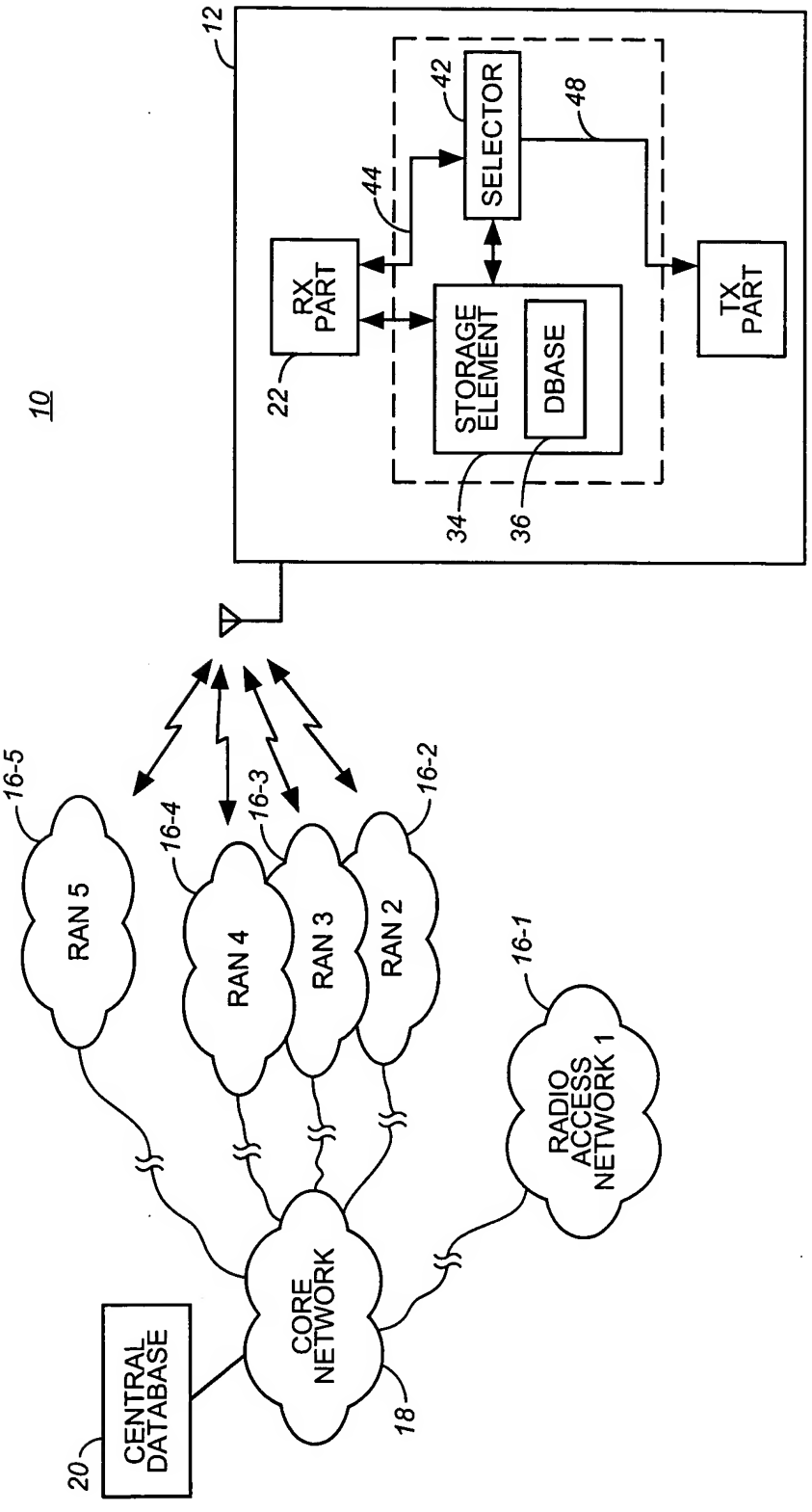
10
12
42
SELECTOR
48
44
RX PART
22
STORAGE ELEMENT
DBASE
34
36
TX PART
16-5
RAN 5
16-4
RAN 4
16-3
RAN 3
16-2
RAN 2
16-1
RADIO ACCESS NETWORK 1
CORE NETWORK
18
CENTRAL DATABASE
20

FIG. 1

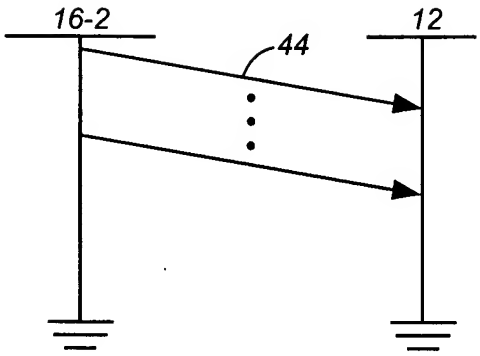

FIG. 2

36

Network ID (11)		Voice Available (14)	Packet Data Available (15)	Network Available (16)
MCCa (12)	MNCa (13)	Yes	No	No (16)
MCCa	MNCb	Yes	Yes	Yes (17)
MCCa	MNCc	Yes	Yes	Yes

FIG. 3

20

Roaming Network	Networks can use roaming network	Service Available
Cellular Network (4)	MCC (12) , MNC (13)	APN(a)[18], APN(b)[19]

FIG. 4

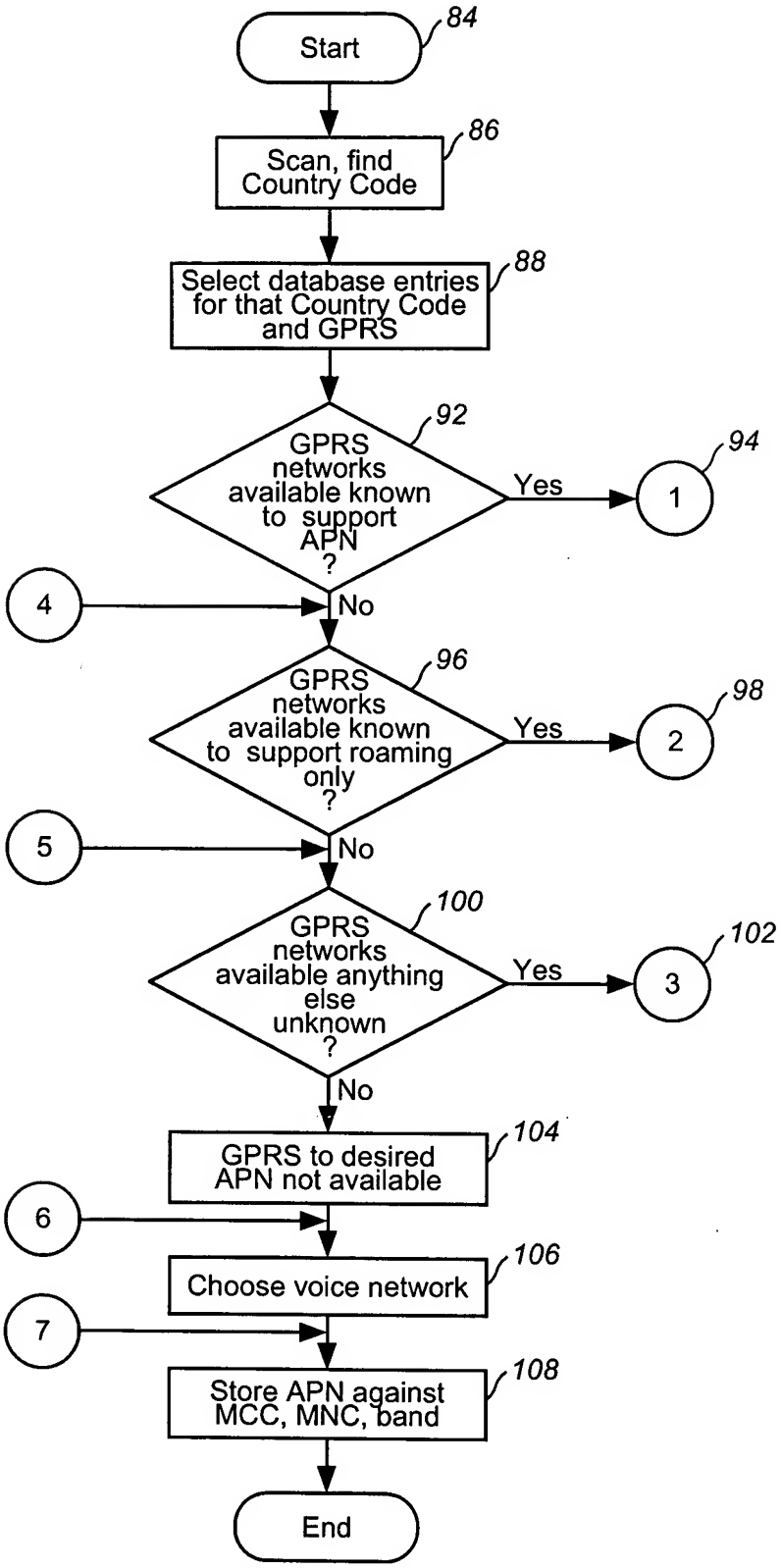
Start
84
Scan, find Country Code
86
Select database entries for that Country Code and GPRS
88
GPRS networks available known to support APN ?
92
Yes
1
94
No
4
GPRS networks available known to support roaming only ?
96
Yes
2
98
No
5
GPRS networks available anything else unknown ?
100
Yes
3
102
No
GPRS to desired APN not available
104
6
Choose voice network
106
7
Store APN against MCC, MNC, band
108
End

FIG. 5

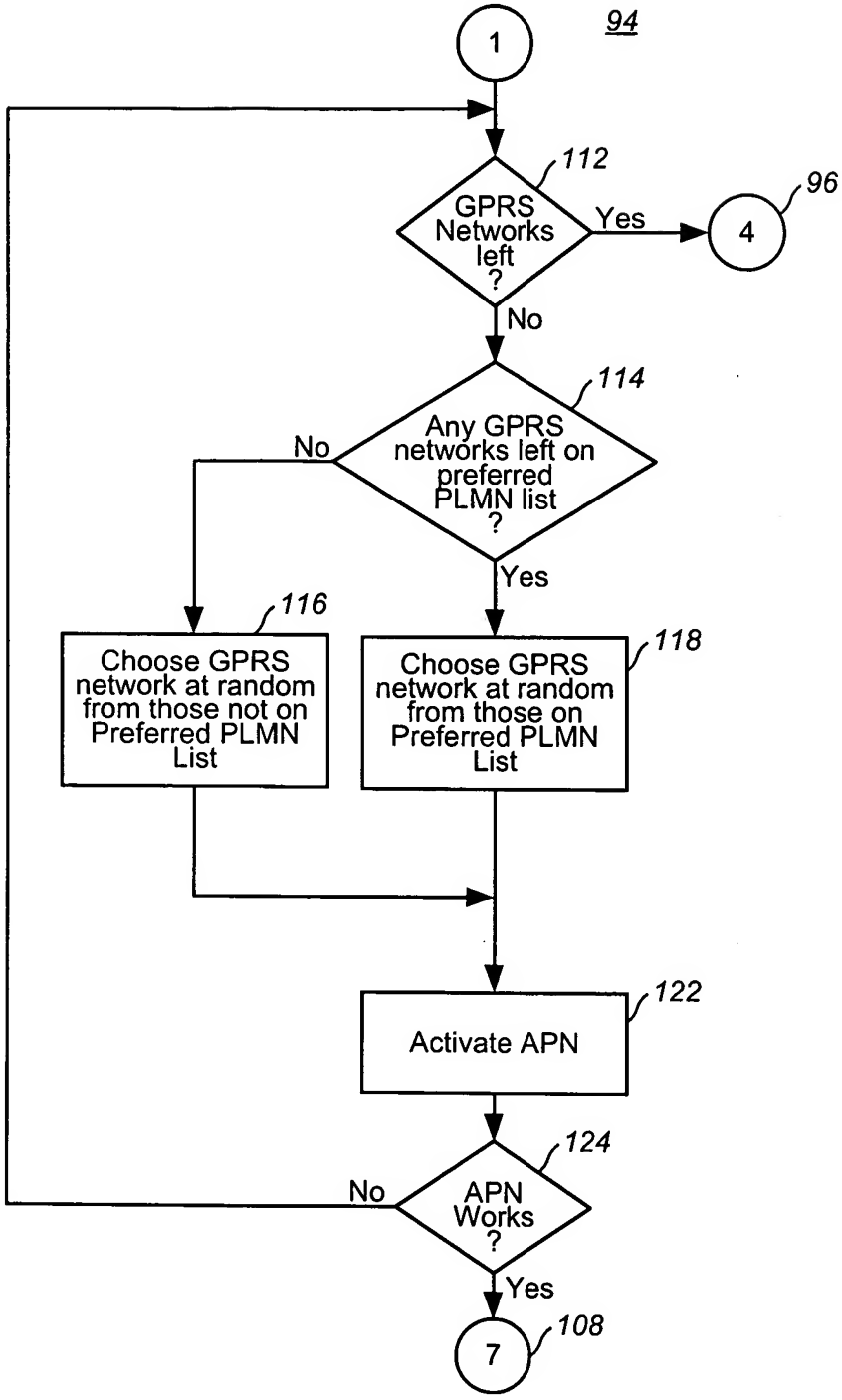
94
1
112
GPRS Networks left ?
Yes
96
4
No
114
Any GPRS networks left on preferred PLMN list ?
No
Yes
116
Choose GPRS network at random from those not on Preferred PLMN List
118
Choose GPRS network at random from those on Preferred PLMN List
122
Activate APN
124
APN Works ?
No
Yes
7
108

FIG. 6

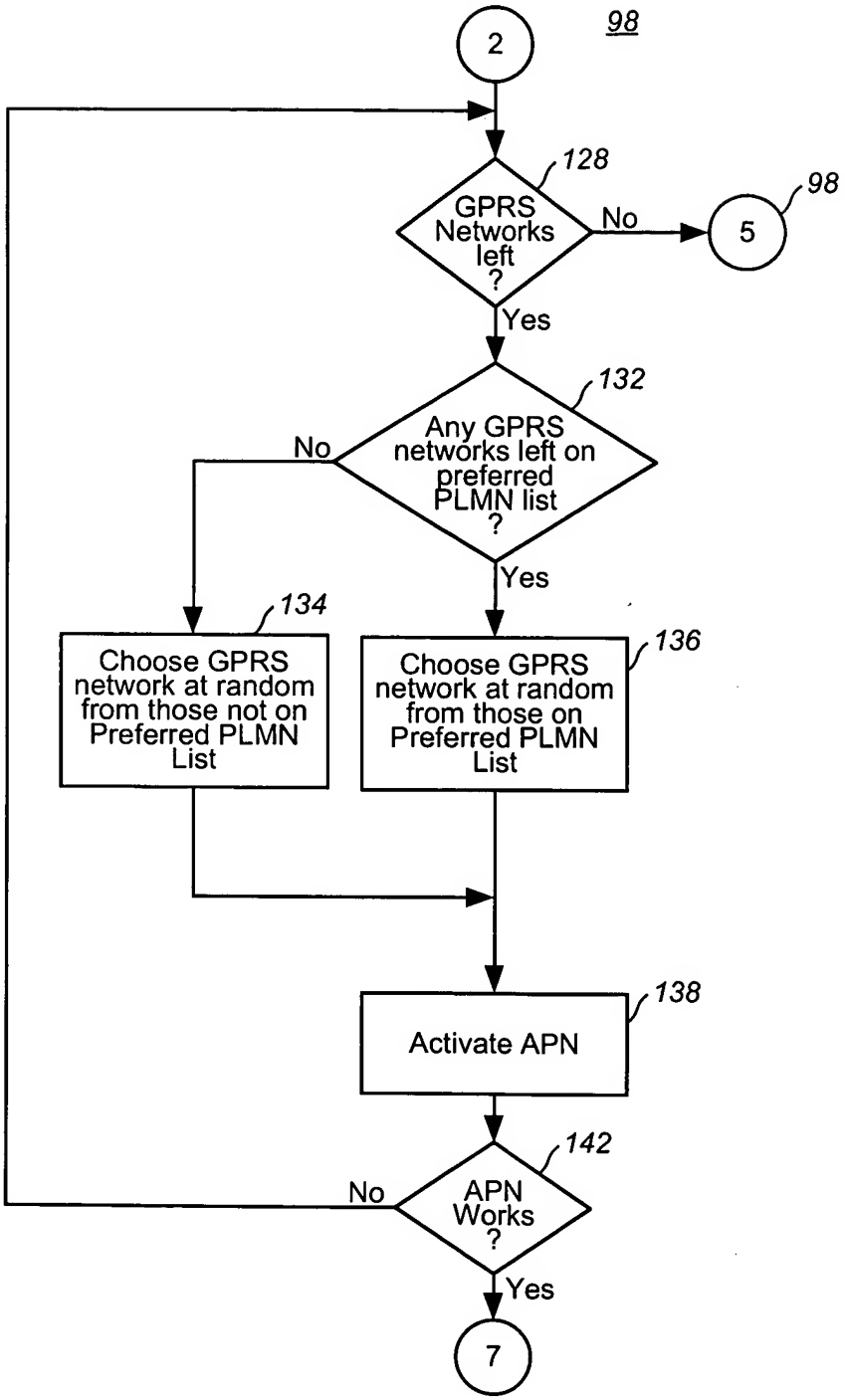
98
2
128
GPRS Networks left ?
No
98
5
Yes
132
Any GPRS networks left on preferred PLMN list ?
No
Yes
134
Choose GPRS network at random from those not on Preferred PLMN List
136
Choose GPRS network at random from those on Preferred PLMN List
138
Activate APN
142
APN Works ?
No
Yes
7

FIG. 7

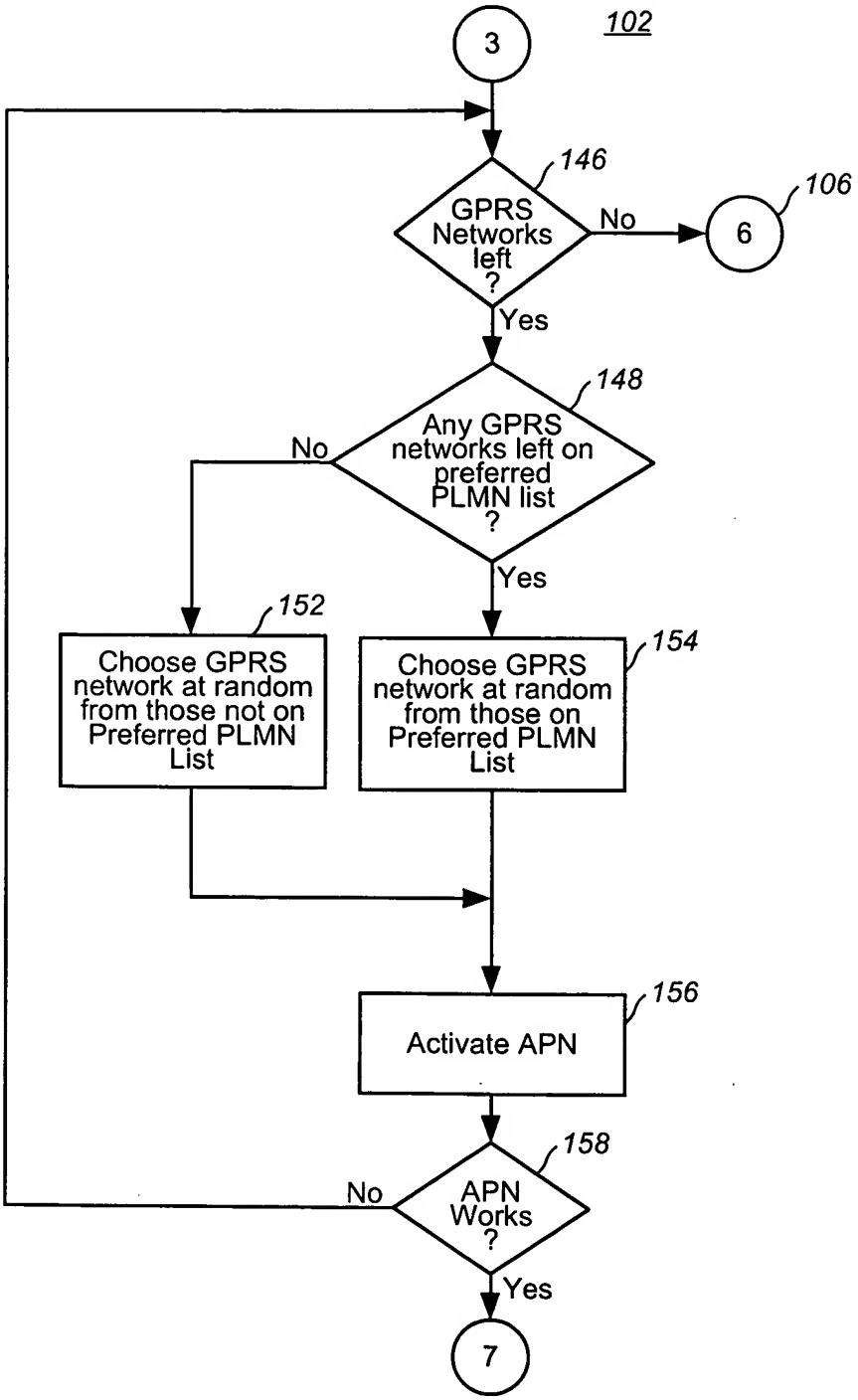
102
3
146
GPRS Networks left ?
No
106
6
Yes
148
Any GPRS networks left on preferred PLMN list ?
No
Yes
152
Choose GPRS network at random from those not on Preferred PLMN List
154
Choose GPRS network at random from those on Preferred PLMN List
156
Activate APN
158
APN Works ?
No
Yes
7

FIG. 8